

**Rocky Flats Citizens Advisory Board
Meeting Minutes
February 5, 2004
6 to 9 p.m.
Broomfield Community Center, Lakeshore Room
280 Lamar Street, Broomfield**

Victor Holm, the Board's chair, called the meeting to order at 6:00 p.m.

BOARD / EX-OFFICIO MEMBERS PRESENT: Joe Downey, Anne Fenerty, Erin Hamby, Victor Holm, Mary Mattson, Mike Maus, Bill McNeill, Sean Rea / Joe Legare (DOE), John Rampe (DOE) Steve Gunderson (CDPHE), Dean Rundle (USFWS), Mark Aguilar (EPA).

BOARD / EX-OFFICIO MEMBERS ABSENT: Jim Fabian, Earl Gunia, Bill Kossack, Andrew Ross, Conrad Stoldt

PUBLIC / OBSERVERS PRESENT: Alan Trenary (Westminster), Rob Henneke (EPA), Ted Auker (CLTC), Scott Surovchak (DOE), Phil Tomlinson (Thornton), Bill Badger (Kaiser-Hill), Carl Spreng (CDPHE), Rick Warner (Broomfield), Karen Wiemelt (Kaiser-Hill), Bob Davis (Kaiser-Hill), Mark Sattelberg (USFWS), Dave Shelton (Kaiser-Hill), Ken Korkia (RFCAB staff), Patricia Rice (RFCAB staff)

STATE OF THE FLATS PRESENTATION – JOE LEGARE, DOE-ROCKY FLATS PROJECT OFFICE:

Joe Legare provided the Department of Energy's perspective on the State of the Flats in 2003. He began by stating that at the end of 2003, the site had accomplished 61% of the work necessary to complete closure. He reported that the site is 7.5% ahead of schedule and 7.8% below cost. Major accomplishments in 2003 included completion of plutonium processing; removal of all weapons-usable material from the site; elimination of the remaining portion of the protected area around Building 371; termination of the International Atomic Energy Agency safeguards; cleanup of Building 771; reaching criticality incredible status in Buildings 771, 776/777, and 559; completion of Building 559 analytical lab mission; closure of TRU waste storage facilities in buildings 991 and 569; and the completion of remediation at the 903 Pad. With respect to plutonium processing, Joe noted that the project lasted much longer and cost far greater than originally estimated. When questioned about the 903 Pad project, Joe stated the project focused on the radiological contamination, while contamination of the subsurface from volatile organic chemicals will be addressed separately.

Joe next reported that safety would be the biggest focus from now until closure, as they try to prevent complacency. DOE as an entity is focusing on oversight of the project to ensure safe closure completion. As a related matter, he discussed the proposed Price-Anderson fine that had been levied against site contractor Kaiser-Hill for worker exposures and other incidents that occurred in 2003. The fine, totaling \$522,500, was for safety incidents including the Building 371 glovebox fire and the ventilation system reversal in Building 776 that resulted in worker inhalation doses. While these incidents and others happened months ago, the DOE Headquarters process to investigate and levy the fines moves slowly. In that time, DOE and Kaiser-Hill have taken steps to address the causes of these incidents by increasing DOE oversight and Kaiser-Hill work planning. When asked, Joe reported that the fine money would go back to the U.S. treasury. In response to a question about what is being done for the workers who received exposures, Joe responded the site would continue to monitor them through its comprehensive bioassay program. The highest exposure a worker received was 300-millirem lifetime dose, which is far lower than the federal work standard of 5,000 millirem. When asked who would be responsible in the future if the exposed workers become ill, Joe replied that DOE would have responsibility for worker benefits, such as health care coverage, as part of its legacy management program.

As for regulatory accomplishments in the past year, Joe stated the most significant was finalization of modifications to the Rocky Flats Cleanup Agreement. DOE and the regulators have also begun negotiations on a post-closure agreement. The site also has received regulatory approval for demolition plans for buildings 444, 776, 881 and 883. They achieved all the 2003 cleanup agreement milestone targets and significant progress is being made on 2004 targets. Conditions that enabled success included working safely and resolving issues related to the federal government's provision of waste and material receiver sites, shipping containers and other

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infrastructure. They also benefited from stable funding, having received \$664 million last year. DOE partnerships with the site contractor, the workforce, the regulators, the community, the Office of Legacy Management, and the U.S. Fish and Wildlife Service also contributed to success.

Joe was asked about orphan wastes. He reported that there are two types: disposal orphans and treatment orphans. Disposal orphans, the largest quantity totaling thousands of drums, are those waste forms for which there currently is no option for ultimate disposal. DOE is working to open disposal sites at two of its facilities, the Nevada Test Site and the Hanford Site. The Nevada Test Site is currently seeking a Resource Conservation and Recovery Act (RCRA) permit modification from the state of Nevada to allow it to bring in mixed low-level radioactive wastes from other states. The Hanford site is currently preparing an Environmental Impact Statement analyzing disposal options at that facility. Joe noted that both locations have political considerations and that DOE Headquarters is working hard to address the issues. In Nevada, there are issues associated with DOE's plans for high-level waste disposal at the neighboring Yucca Mountain. At Hanford, there are pressures for DOE to complete cleanup of the high-level waste tanks and the need to meet waste shipping schedules for wastes that need to leave the site before new wastes are brought in. The treatment orphans total about 50 cubic meters in volume. Some of these are radiological wastes mixed with polychlorinated biphenyls (PCBs), while others are transuranic wastes that require further treatment before they meet waste acceptance criteria at the Waste Isolation Pilot Plant (WIPP) in New Mexico. In related follow-up questions later in the meeting, Joe stated that should DOE not be able to secure permanent disposal at Nevada or Hanford by the closure deadline, they might need to seek interim storage of the wastes at other offsite locations, and as a less desirable option, may need to construct a temporary waste storage facility at Rocky Flats. Ranked in priority, DOE options are first to send the wastes to Hanford, second to ship them to Nevada, third to find an offsite temporary storage facility, and last to continue storing the wastes at Rocky Flats.

The presentation next discussed transition to Legacy Management. Joe introduced Scott Surovchak who recently was hired by Legacy Management to be an onsite representative. Transition project teams with representatives from DOE at Rocky Flats, DOE Headquarters personnel from the Offices of Environmental Management and Legacy Management, and Kaiser-Hill employees have been formed to look at topics such as environment, property, personnel, procurement and finance, community relations, program management, and business and administration. These teams are looking at site activities that will continue post-closure and the timing of their transfer to legacy management, as well as any integration with the U.S. Fish and Wildlife Service. Joe reported that Fish and Wildlife has an onsite representative who works with them on a regular basis. In response to a question, he reported that Fish and Wildlife would have responsibility for the entire site when it becomes a wildlife refuge, while the Office of Legacy Management will have jurisdiction over the remaining contaminated areas.

Joe next addressed workforce transition. DOE has reduced its staff from 159 to 54 employees over the past year. Most of the displaced workers have found jobs elsewhere in government, with only 20-30 having received involuntary separations. DOE has now relocated all of its employees, with the exception of site facility representatives, to its new Mountain View offices located in Broomfield. One challenge the site faces is retention of workers with key job skills. When asked, Joe reported the site uses retention bonuses, promises of future jobs, and other tools to retain key skills. In some instances they are bringing in outside personnel to assist them in key areas. Some people have been picked up by DOE Headquarters and detailed back to serve at Rocky Flats.

For the coming year, Joe stated the site would be focusing on regulatory closure and site transfer. Once Kaiser-Hill completes its work, the site will need to seek regulatory approval and finalize a Corrective Action Decision /Record of Decision (CAD/ROD) with EPA and the state. To complete the CAD/ROD, the site will need to study the work that has been done and perform a risk analysis to make sure that conditions on the site will protect future wildlife refuge workers. Once regulatory approval has been achieved, transfer of the site to the U.S. Fish and Wildlife Service and to the Office of Legacy Management will occur.

In closing, Joe noted that once the cleanup is complete and regulatory approval is achieved, DOE is committed to a continuing role at the site through its Office of Legacy Management. Institutional and engineered controls will be in place and there will be environmental monitoring and periodic reviews. He affirmed that DOE will partner with Fish and Wildlife to ensure a smooth transition and that public involvement will be part of DOE's long-term

management role.

One member noted that Joe did not list physical controls, such as fences, as being a necessary part of the post-closure landscape. Joe noted that if the site meets its cleanup goals, the level of residual contamination would not pose a health risk, so fences are not necessary. Steve Gunderson with the state health department affirmed this position. Dean Rundle with Fish and Wildlife stated that his agency has experience in closing off areas where people should not go. If someone intrudes, it becomes a law enforcement action. Dean pointed out that if the public is concerned about the need for fences or other physical controls, they need to raise the issue to DOE and the regulators as part of the remedy design. When asked about future surveillance, Joe reported that it hasn't been fully defined, although he knows that DOE, the regulators and Fish and Wildlife will all have roles.

STATE OF THE FLATS PRESENTATION – DAVE SHELTON, KAISER-HILL:

Dave Shelton with site contractor, Kaiser-Hill, presented his organization's views. Dave began by noting that with the completion of nuclear materials handling at the site, Rocky Flats is becoming more of an industrial facility, rather than a nuclear facility. In such an environment, they need to have constant vigilance on safety. Kaiser-Hill remains optimistic that the site will meet its closure goal of December 2006, if not sooner.

The site's main safety goals are that no one gets hurt, that radiation doses are minimized as much as possible, and that external releases to the environment are prevented. Dave presented several slides showing how the site compares to the construction industry as a whole, and to the rest of the DOE complex, in terms of important safety measures. Measures, such as recordable injuries and lost workdays, are far below the construction industry and also below the rest of the DOE complex. Radiation workers at the site in 2003 received an average 120-millirem exposure, which is below the Rocky Flats administration level control limit of 500 millirem, far below the DOE limit of 2,000 millirem, and substantially below the federal work limit of 5,000 millirem. One worker in 2003 received a dose slightly more than 1,000 millirem. The combined site dose to all workers was 204,000 millirem. Dave pointed out that most of the "hot" work where workers come into contact with nuclear materials is now behind them. Air emissions leaving the site as measured at the east boundary were less than one percent of the Federal limit of 10 millirem. Water quality also met standards during the past year.

Dave reported the main safety challenge for the site is doing work that no one has ever done before. To address this challenge, they are improving their work planning and self-assessment processes, as well as implementing more effective corrective actions and increasing site-wide communication to raise worker awareness of hazards.

Dave next reviewed major site accomplishments including stabilization, packaging and shipping of special nuclear materials. About one-half of the site structures have now been demolished. Eight of the top ten environmental remediation projects have been completed, including the 903 Pad. Work is ongoing on the inner lip of the 903 Pad area, with the entire lip area scheduled for completion in July 2004. Dave noted the site is having good success in dust and erosion control in this area. As for waste shipping, they averaged 67 shipments per week in 2003. In all, 35,000 truckloads will be needed to ship all the wastes offsite. About 17,000 truckloads have left the site so far, and 18,000 will be needed in the next two years. Dave stated that last week alone, 167 shipments left the site.

The site's goals for 2004 include demolition of Buildings 771, 707, 991, 883, 881 and 443. They hope to have Buildings 776/777 and 444 ready for demolition by the end of the year. They also plan to have all the steam lines removed and sewer and water service terminated by the end of the year. In environmental restoration, they plan to complete the 903 Pad Lip Area and the Present Landfill, as well as removing all accessible original process waste lines (those that are outside of building footprints). A question arose about the original process waste lines, and both site and regulator representatives stated that the relative lack of contamination associated with the lines removed so far has been a pleasant surprise. It was noted that the Actinide Migration Evaluation researchers had concluded that plutonium in the soil is not greatly mobile and that conclusion seems to be true as far as the leaks that occurred in the process waste lines. The contamination associated with the leaks has been fairly localized. So far 1,000 linear feet of lines have been removed and eight intermodal containers of contaminated soil have been removed, mostly north of building 776.

In concluding his presentation, Dave noted the site is making solid progress toward closure earlier than 2006. He cautioned the site must stay vigilant and focused, and that safe performance is key to the site's success.

In final comments, a member asked whether DOE intends to fund the Board in 2005. Joe Legare replied he understood that DOE did intend to fund the Board.

PUBLIC COMMENT PERIOD:

Public Comment: Alan Trenary: Alan expressed concern with a story he had read in the paper that day concerning the cut-off of funding for the Rocky Flats Coalition of Local Governments and expressed appreciation for the work that they do. He believes that because of the contamination that is going to be left behind there needs to be continued public involvement in order to protect future generations.

Joe Legare with DOE responded that Frazer Lockhart, the site manager, would be sending a letter to Legacy Management expressing that the Coalition has been an asset to site decision-making. He pointed out that the money to support the Coalition does not come from the site, but from the DOE Office of Worker and Community Transition. He also stated that the Office of Worker and Community Transition did have some money left over from 2003, around \$100K, that Joe was able to have added to the Coalition's grant for this year. This amount, plus what they had in the bank already, would put them in "good shape" for another fourteen months. Steve Gunderson with CDPHE stated that his office would also be sending a letter of support for the Coalition to DOE.

Public Comment: Ted Auker: Ted began by thanking Dave Shelton for pointing out in his presentation that it is was the site workers who were responsible for safety improvements. He further stated that when management tells the workers such things in the workplace setting, there may be some doubts, but when management is willing to express such a sentiment in a public setting such as this, it lends credibility to what management is saying.

PRESENTATION ON THE ORIGINAL LANDFILL INTERIM MEASURE/INTERIM REMEDIAL ACTION:

Bob Davis of Kaiser-Hill gave a presentation on the Original Landfill. The 20-acre landfill, located on the hillside south of the Industrial Area, was no more than a dump and was used from 1952 to 1968. About 74,000 cubic yards of waste, mostly construction debris and general facility waste, was dumped at the site. While there was no routine disposal of hazardous waste, small amounts of some harmful chemicals may have been left there.

Four hotspots of uranium in the landfill were caused when the uranium caught fire on the back of a flatbed truck and were dumped on the spot. These hotspots will be removed.

The Interim Measure/Interim Remedial Action (IM/IRA) for the landfill will address three alternatives for remediation: no action; grading the landfill and covering it; and removing the contents and disposing of them offsite. The preferred alternative is to grade the landfill and cover it with a cap that conforms to regulations under the Resource Conservation and Recovery Act (RCRA). Grading is needed to decrease instability of the slope. Part of cleanup would include filling in the South Interceptor Ditch (SID) in that portion of the site. The SID was originally meant to catch potentially contaminated runoff from the Industrial Area (IA) before it reached Woman Creek. When the site is closed, there will be less runoff because pavement and roads in the IA will have been removed.

In answer to a question on monitoring, Steve Gunderson of the Colorado Department of Public Health and Environment said the landfill does not leak and does not produce methane gas. Leaks and gas production have been problems in older municipal landfills. However, because the landfill will be capped in place, it will have to be monitored.

Bob said proposed legacy management or stewardship activities would include inspection of the cover and drainage ditches. Stewardship would also entail monitoring of surface water and groundwater for volatile organic compounds (VOCs). Institutional controls would include bans on excavation, construction of roads and trails, and

drilling on the cover and immediate area, as well as a ban on disturbance of monitoring points. Bob said they are also considering the installation of signs. There would be upgradient and downgradient monitoring points for both groundwater and surface water.

Characterization of the landfill has included thousands of analyses of surface soil, subsurface soil, groundwater and surface water. For surface soil, the uranium hotspots have been well defined and will be removed. Two analyses have been above the action level for polyaromatic hydrocarbons. In the subsurface, two of 129 samples were above the action level for polyaromatic hydrocarbons. Bob said the landfill has not significantly affected ground or surface water.

Bob said most of the landfill is structurally stable, although it is in an area of geological landsliding and a potential area of stability concern. There is no physical evidence to indicate the landfill is unstable, however. Additional investigation is needed to further assess geological instability.

The Draft IM/IRA is expected to be released for public comment between April and May.

PRESENTATION ON THE INDUSTRIAL GROUNDWATER INTERIM MEASURE/INTERIM REMEDIAL ACTION DOCUMENT:

Karen Wiemelt of Kaiser-Hill gave a presentation on the Groundwater Interim Measure/Interim Remedial Action (IM/IRA) being developed by Kaiser-Hill. The scope of the IM/IRA includes a site wide groundwater analysis for volatile organic compounds (VOCs). The document will consider each groundwater plume separately within the framework of the larger document. The IM/IRA will also analyze actions to be taken, which may include the installation of groundwater systems and source removal. It will analyze existing groundwater systems. It will also cover the groundwater around Building 771, which had been the subject of a separate Proposed Action Memorandum (PAM) that had proposed a groundwater collection system near Building 771. The PAM is no longer being considered.

Interim Measure/Interim Remedial Actions (IM/IRAs) usually consider several alternatives. Alternatives for the Groundwater IM/IRA include no action, source removal, installation of reactive barriers or collection and treatment systems, monitoring and attenuation, biodegradation, and long-term monitoring.

In answer to a question, Karen said the document would be the decision document for the carbon tetrachloride (CCl₄) plume.

BOARD BUSINESS:

- Officer Elections to Replace Vacancies: At the end of last year, two of the Board's officers resigned, the vice-chair and treasurer. An election to replace these officers was scheduled for this meeting. Only one nomination was made for each office, Joe Downey for vice-chair and Andrew Ross for treasurer. With no further nominations, the Board voted to approve the two nominations by acclamation.
- Approval of Budget for 2004: The Board discussed its budget proposal for 2004, totaling \$234,079. Board Chair Victor Holm noted that DOE has promised \$175K towards this budget, while the remainder will come from funds left over in 2003. One member noted it would be prudent to spend wisely during the coming year as DOE stated last year that they intended to provide only \$100K in new funding for 2005. By not saving this year, the Board may not have enough funds to support its basic operations in 2005. Another member stressed that the Board needs to begin now to research other funds, such as money from the Office of Legacy Management, to support its activities in 2005. Members generally agreed to the two points raised. Following this discussion, the members voted to approve the proposed budget.
- Review and Approval of New Member Applications: Victor Holm raised the need for the Board to decide how it wanted to approve membership applications. Currently, the Board has three individuals who have submitted applications for Board membership. Victor proposed that rather than reconstituting a membership committee, the Board would consider the applicants as a committee of the whole. Each member would receive the applications to review. If they had a concern with an applicant or wished to gain further information, they

would make that request to the chair. The chair would then contact the applicant to discuss the matter and get back to the member raising the concern. Victor also noted it would be a good idea to have him or another Board member contact each of the applicants to discuss the Board's decision-making process through consensus and ascertain the applicant's commitment to working in such a manner. Following the conversation with the applicants and a report back to the Board, the members would vote on approving the applicants at a subsequent meeting. The Board would rely on email communication for much of this process. The members agreed to this proposal.

- **Future Meetings:** Board/Staff Coordinator Ken Korkia concluded the meeting by reviewing the agenda topics for both the February Committee Night and the March Board meeting. For the March Board meeting, the U.S. Fish and Wildlife Service is scheduled to present the draft Comprehensive Conservation Plan / Environmental Impact Statement for the future Rocky Flats National Wildlife Refuge. Since the Board learned at this meeting that the date for release of the draft Interim Measure / Interim Remedial Action documents for the Original Landfill and the Industrial Area Groundwater had been pushed back until later in the spring, the topics originally planned for the February Committee Night were no longer valid. As a replacement, Ken proposed the Board follow-up on the suggestion made earlier in the meeting that the Board hold a study session to learn more about groundwater modeling and other technical topics associated with groundwater at the site. Members agreed this would be a good topic, so Ken will invite site representatives with expertise in groundwater to attend the meeting. Another topic raised for consideration during the meeting is that the Board hold a discussion on future public involvement, since DOE has expressed this is an area where it would like input.

NEXT MEETING:

Date: March 4, 6 to 9:00 p.m.
Location: College Hill Library, Room L268, Front Range Community College
Agenda: • *Presentation and Discussion on the Comprehensive Conservation Plan/Environmental Impact Statement for the Rocky Flats National Wildlife Refuge*

MEETING ADJOURNED AT 9:00 p.m. *

(* Taped transcript of full meeting is available in the RFCAB office.

RESPECTFULLY SUBMITTED:

Anne Fenerty, Secretary
Rocky Flats Citizens Advisory Board

The Rocky Flats Citizens Advisory Board is a community advisory group that reviews and provides recommendations on cleanup plans for Rocky Flats, a former nuclear weapons plant outside of Denver, Colorado.

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